



March 17, 2010

Garrett A. Stone, Esquire
Brickfield, Burchette and Ritts, P.C.
1025 Thomas Jefferson Street, NW
8th Floor, West Tower
Washington, D.C. 20007

Re: SCPSC Docket No. 2010-1-E

Dear Garrett:

Pursuant to the December 21, 1998 agreement entered into by and between Progress Energy Carolinas, Inc. and Nucor in Docket No. 1999-29-E, enclosed is documentation required by paragraph 1 of that agreement regarding PEC's actual system nuclear capacity factor calculation. As you can see, PEC met the 92.5% goal.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Len S. Anthony'.

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA:mhm

Enclosure

cc: Jocelyn Boyd (w/enc.)
John Flitter (w/enc.)

STAREG920

Report to
NUCOR STEEL CORPORATION

Of

Progress Energy Carolinas
Nuclear System Capacity Factor

Pursuant to
SCPSC Docket 1999-029-E

Test Period
March 1, 2009
Through
February 28, 2010

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Progress Energy Carolinas Nuclear Capacity Factor Calculation (Unadjusted) March 1, 2009 – February 28, 2010

**Net Electrical Generation during the Test Period March 1, 2009 to February 28, 2010
Reported to the NRC and available in the NRC's Public Documents Collection**

| | MWhs |
|---------------------------------|-------------------|
| Brunswick Unit 1 | 7,943,890 |
| Brunswick Unit 2 | 6,298,536 |
| Harris Unit 1 | 7,406,856 |
| Robinson Unit 2 | 6,472,367 |
| A – Total Net Generation | 28,121,649 |

Unit Maximum Dependable Capacity (MW)

Reported to the NRC and available in the NRC's Public Documents Collection

| | March – December 2009 MDC (MW) | January – February 2010 MDC (MW) |
|---|---|---|
| Brunswick Unit 1 | 938 | 938 |
| Brunswick Unit 2 | 920 | 920 |
| Harris Unit 1 | 900 | 900 |
| Robinson Unit 2 | 710 | 724 |
| B – Max Dependable Capacity for 2009 | 3,468 | |
| C – Max Dependable Capacity for 2010 | | 3,482 |

Period Hours in the Test Period March 1, 2009 to February 28, 2010

| | |
|---|--------------|
| D – Period Hours from 3/1/09 to 12/31/09 | 7,344 |
| E – Period Hours from 1/1/10 to 2/28/10 | 1,416 |

Capacity Factor Formula

$$[(A) / (B \times D) + (C \times E)] = 92.5\%$$

Progress Energy Carolinas Nuclear Capacity Factor Calculation Adjusted for Refueling Outages Only and Steam Generator Replacement Outages of 100 Days or Less March 1, 2009 – February 28, 2010

Net Electrical Generation during the Test Period March 1, 2009 to February 28, 2010
Reported to the NRC and available in the NRC's Public Documents Collection

| | MWhs |
|-----------------------------|-------------------|
| Brunswick Unit 1 | 7,943,890 |
| Brunswick Unit 2 | 6,298,536 |
| Harris Unit 1 | 7,406,856 |
| Robinson Unit 2 | 6,472,367 |
| Total Net Generation | 28,121,649 |

Refueling outages of 40 days or less and steam generator replacement outages of 100 days or less

| | MWh Losses |
|--------------------|----------------|
| Brunswick Unit 1 | 46,768 |
| Brunswick Unit 2 * | 0 |
| Harris Unit 1 | 495,270 |
| Robinson Unit 2 | 0 |
| Total | 542,038 |

| | |
|--|-------------------|
| A – Total Test Period Net Generation + Adjustment for refueling outages & steam generator replacement outages | 28,663,687 |
|--|-------------------|

* Brunswick Unit 2 spring 2009 refueling outage began February 28, 2009, and was returned to service on April 29, 2009. Total refueling outage duration was 60 days, 12 hours, and 42 minutes.

Unit Maximum Dependable Capacity (MW)

Reported to the NRC and available in the NRC's Public Documents Collection

| | March – December 2009 MDC (MW) | January – February 2010 MDC (MW) |
|---|-----------------------------------|-------------------------------------|
| Brunswick Unit 1 | 938 | 938 |
| Brunswick Unit 2 | 920 | 920 |
| Harris Unit 1 | 900 | 900 |
| Robinson Unit 2 | 710 | 724 |
| B – Max Dependable Capacity for 2009 | 3,468 | |
| C – Max Dependable Capacity for 2010 | | 3,482 |

Period Hours in the Test Period March 1, 2009 to February 28, 2010

| | |
|---|--------------|
| D – Period Hours from 3/1/09 to 12/31/09 | 7,344 |
| E – Period Hours from 1/1/10 to 2/28/10 | 1,416 |

Capacity Factor Formula

$$[(A) / (B \times D) + (C \times E)] = 94.3\%$$

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor $\geq 92.5\%$ during the 12 month period under review. For the test period March 1, 2009 through February 28, 2010, actual period to date performance is summarized below.

Period to Date: March 1, 2009 through February 28, 2010

Nuclear System Capacity Factor Calculation (Based on net generation)

- | | | |
|----|--|--|
| A. | Nuclear system actual generation for SCPSC test period | A = 28,121,649 MWH |
| B. | Total number of hours during SCPSC test period | B = 8,760 hours |
| C. | Nuclear system MDC during SCPSC test period (see page 2) | C = 3,468 MW for 2009 3,482 MW for 2010 |
| D. | Reasonable nuclear system reductions (see page 2) | D = 3,013,218 MWH |
| E. | SC Fuel Case nuclear system capacity factor: $[(A+D) / (B*C)]*100 = 102.4\%$ | |

NOTE:

If Line Item E $\geq 92.5\%$, presumption of utility's minimum cost operation
If Line Item E $< 92.5\%$, utility has burden of proof of reasonable operations

Note: Robinson Unit 2 MDC value was increased by 14 MW, effective 1/1/10, primarily reflecting the impact of changes associated with calculation methods (NERC requires annual evaluation of environmental and operational parameters; former process used three to five-year average), environmental monitoring and compliance, and the impact of equipment degradation.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: March 1, 2009 to February 28, 2010

| Nuclear Unit Name and Designation | BNP Unit # 1 | BNP Unit # 2 | HNP Unit # 1 | RNP Unit # 2 | Nuclear System |
|---|-----------------|-----------------|-----------------|-----------------|-------------------|
| Unit MDC (March – December 2009) | 938 MW | 920 MW | 900 MW | 710 MW | 3,468 MW |
| Unit MDC (January – February 2010) | 938 MW | 920 MW | 900 MW | 724 MW | 3,482 MW |
| Reasonable refueling outage time (MWH) | 46,768 | 1,315,891 | 495,270 | 0 | |
| Reasonable maintenance, repair, and equipment replacement outage time (MWH) | 300,340 | 507,172 | 120,247 | 81,561 | |
| Reasonable coast down power reductions (MWH) | 5,558 | 0 | 24,856 | 0 | |
| Reasonable power ascension power reductions (MWH) | 13,400 | 42,566 | 25,920 | 0 | |
| Prudent NRC required testing outages (MWH) | 16,967 | 16,474 | 228 | 0 | |
| SCPSC identified outages not directly under utility control (MWH) | 0 | 0 | 0 | 0 | |
| Acts of Nature reductions (MWH) | 0 | 0 | 0 | 0 | |
| Reasonable nuclear reduction due to low system load (MWH) | 0 | 0 | 0 | 0 | |
| Unit total excluded MWH | 383,033 | 1,882,103 | 666,521 | 81,561 | |
| Total reasonable outage time exclusions [carry to Page 1, Line D] | | | | | 3,013,218 |

ATTACHMENT A

Recorded Generation and Capacity Factors (Test Period March 1, 2009 - February 28, 2010)

| Monthly Generation | | | | | | |
|---------------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|
| Month | BNP 1 | BNP 2 | BNP | HNP | RNP | Carolina Fleet |
| March 2009 | 706,650 | -3,057 | 703,593 | 688,165 | 566,438 | 1,958,196 |
| April 2009 | 691,620 | 8,812 | 700,432 | 342,241 | 504,260 | 1,546,933 |
| May 2009 | 703,953 | 613,351 | 1,317,304 | 441,456 | 555,017 | 2,313,777 |
| June 2009 | 679,293 | 611,706 | 1,290,999 | 659,020 | 526,657 | 2,476,676 |
| July 2009 | 697,753 | 693,644 | 1,391,397 | 680,311 | 543,523 | 2,615,231 |
| August 2009 | 679,296 | 686,770 | 1,366,066 | 678,090 | 542,487 | 2,586,643 |
| September 2009 | 445,366 | 449,456 | 894,822 | 657,569 | 530,671 | 2,083,062 |
| October 2009 | 673,715 | 663,363 | 1,337,078 | 689,492 | 552,952 | 2,579,522 |
| November 2009 | 687,861 | 676,898 | 1,364,759 | 551,057 | 503,638 | 2,419,454 |
| December 2009 | 710,188 | 705,613 | 1,415,801 | 697,061 | 565,446 | 2,678,308 |
| January 2010 | 697,435 | 685,924 | 1,383,359 | 690,254 | 568,020 | 2,641,633 |
| February 2010 | 570,760 | 506,056 | 1,076,816 | 632,140 | 513,258 | 2,222,214 |
| TOTAL | 7,943,890 | 6,298,536 | 14,242,426 | 7,406,856 | 6,472,367 | 28,121,649 |

| Monthly Capacity Factor (Unadjusted) | | | | | | |
|---|--------------|--------------|--------------|--------------|---------------|----------------|
| Month | BNP 1 | BNP 2 | BNP | HNP | RNP | Carolina Fleet |
| MDC - March to December 2009 | 938 | 920 | 1,858 | 900 | 710 | 3,468 |
| MDC - January to February 2010 | 938 | 920 | 1,858 | 900 | 724 | 3,482 |
| March 2009 | 101.4% | -0.4% | 51.0% | 102.9% | 107.4% | 76.0% |
| April 2009 | 102.4% | 1.3% | 52.4% | 52.8% | 98.6% | 62.0% |
| May 2009 | 100.9% | 89.6% | 95.3% | 65.9% | 105.1% | 89.7% |
| June 2009 | 100.6% | 92.3% | 96.5% | 101.7% | 103.0% | 99.2% |
| July 2009 | 100.0% | 101.3% | 100.7% | 101.6% | 102.9% | 101.4% |
| August 2009 | 97.3% | 100.3% | 98.8% | 101.3% | 102.7% | 100.3% |
| September 2009 | 65.9% | 67.9% | 66.9% | 101.5% | 103.8% | 83.4% |
| October 2009 | 96.5% | 96.9% | 96.7% | 103.0% | 104.7% | 100.0% |
| November 2009 | 101.7% | 102.0% | 101.9% | 84.9% | 98.4% | 96.8% |
| December 2009 | 101.8% | 103.1% | 102.4% | 104.1% | 107.0% | 103.8% |
| January 2010 | 99.9% | 100.2% | 100.1% | 103.1% | 105.5% | 102.0% |
| February 2010 | 90.5% | 81.9% | 86.2% | 104.5% | 105.5% | 95.0% |
| TOTAL | 96.7% | 78.2% | 87.5% | 93.9% | 103.7% | 92.5% |

| Year to Date Generation (Unadjusted) | | | | | | |
|---|-----------|-----------|------------|-----------|-----------|----------------|
| Month | BNP 1 | BNP 2 | BNP | HNP | RNP | Carolina Fleet |
| March 2009 | 706,650 | -3,057 | 703,593 | 688,165 | 566,438 | 1,958,196 |
| April 2009 | 1,398,270 | 5,755 | 1,404,025 | 1,030,406 | 1,070,698 | 3,505,129 |
| May 2009 | 2,102,223 | 619,106 | 2,721,329 | 1,471,862 | 1,625,715 | 5,818,906 |
| June 2009 | 2,781,516 | 1,230,812 | 4,012,328 | 2,130,882 | 2,152,372 | 8,295,582 |
| July 2009 | 3,479,269 | 1,924,456 | 5,403,725 | 2,811,193 | 2,695,895 | 10,910,813 |
| August 2009 | 4,158,565 | 2,611,226 | 6,769,791 | 3,489,283 | 3,238,382 | 13,497,456 |
| September 2009 | 4,603,931 | 3,060,682 | 7,664,613 | 4,146,852 | 3,769,053 | 15,580,518 |
| October 2009 | 5,277,646 | 3,724,045 | 9,001,691 | 4,836,344 | 4,322,005 | 18,160,040 |
| November 2009 | 5,965,507 | 4,400,943 | 10,366,450 | 5,387,401 | 4,825,643 | 20,579,494 |
| December 2009 | 6,675,695 | 5,106,556 | 11,782,251 | 6,084,462 | 5,391,089 | 23,257,802 |
| January 2010 | 7,373,130 | 5,792,480 | 13,165,610 | 6,774,716 | 5,959,109 | 25,899,435 |
| February 2010 | 7,943,890 | 6,298,536 | 14,242,426 | 7,406,856 | 6,472,367 | 28,121,649 |

| Year to Date Capacity Factor (Unadjusted) | | | | | | |
|--|--------|-------|-------|--------|--------|----------------|
| Month | BNP 1 | BNP 2 | BNP | HNP | RNP | Carolina Fleet |
| March 2009 | 101.4% | -0.4% | 51.0% | 102.9% | 107.4% | 76.0% |
| April 2009 | 101.9% | 0.4% | 51.7% | 78.3% | 103.1% | 69.1% |
| May 2009 | 101.5% | 30.5% | 66.4% | 74.1% | 103.7% | 76.0% |
| June 2009 | 101.3% | 45.7% | 73.8% | 80.9% | 103.6% | 81.7% |
| July 2009 | 101.0% | 57.0% | 79.2% | 85.1% | 103.4% | 85.7% |
| August 2009 | 100.4% | 64.3% | 82.5% | 87.8% | 103.3% | 88.2% |
| September 2009 | 95.6% | 64.8% | 80.3% | 89.7% | 103.4% | 87.5% |
| October 2009 | 95.7% | 68.9% | 82.4% | 91.4% | 103.5% | 89.1% |
| November 2009 | 96.4% | 72.5% | 84.5% | 90.7% | 103.0% | 89.9% |
| December 2009 | 96.9% | 75.6% | 86.3% | 92.1% | 103.4% | 91.3% |
| January 2010 | 97.2% | 77.8% | 87.6% | 93.1% | 103.6% | 92.3% |
| February 2010 | 96.7% | 78.2% | 87.5% | 93.9% | 103.7% | 92.5% |

ATTACHMENT B

Brunswick Unit 1 March 1, 2009 – February 28, 2010 Test Period MWh Losses by Cause

| | Refuel | Repairs | Coastdowns | Power Ascension | Testing | SCPSC | Acts of Nature | Low Load | Total |
|--------|--------|---------|------------|--------------------|---------|-------|-------------------|----------|---------|
| Mar-09 | 0 | 1,511 | 0 | 0 | 4,991 | 0 | 0 | 0 | 6,502 |
| Apr-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| May-09 | 0 | 35 | 0 | 0 | 6,037 | 0 | 0 | 0 | 6,072 |
| Jun-09 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| Jul-09 | 0 | 2,317 | 0 | 0 | 0 | 0 | 0 | 0 | 2,317 |
| Aug-09 | 0 | 17,903 | 0 | 0 | 0 | 0 | 0 | 0 | 17,903 |
| Sep-09 | 0 | 231,300 | 0 | 0 | 0 | 0 | 0 | 0 | 231,300 |
| Oct-09 | 0 | 23,621 | 0 | 13,400 | 0 | 0 | 0 | 0 | 37,021 |
| Nov-09 | 0 | 491 | 0 | 0 | 5,939 | 0 | 0 | 0 | 6,430 |
| Dec-09 | 0 | 6,415 | 0 | 0 | 0 | 0 | 0 | 0 | 6,415 |
| Jan-10 | 0 | 16,720 | 0 | 0 | 0 | 0 | 0 | 0 | 16,720 |
| Feb-10 | 46,768 | 0 | 5,558 | 0 | 0 | 0 | 0 | 0 | 52,326 |
| Total | 46,768 | 300,340 | 5,558 | 13,400 | 16,967 | 0 | 0 | 0 | 383,033 |

Brunswick Unit 2 March 1, 2009 – February 28, 2010 Test Period MWh Losses by Cause

| | Refuel | Repairs | Coastdowns | Power Ascension | Testing | SCPSC | Acts of Nature | Low Load | Total |
|--------|-----------|---------|------------|--------------------|---------|-------|-------------------|----------|-----------|
| Mar-09 | 683,560 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 683,560 |
| Apr-09 | 632,331 | 0 | 0 | 15,492 | 0 | 0 | 0 | 0 | 647,823 |
| May-09 | 0 | 77,759 | 0 | 4,948 | 0 | 0 | 0 | 0 | 82,707 |
| Jun-09 | 0 | 58,297 | 0 | 0 | 0 | 0 | 0 | 0 | 58,297 |
| Jul-09 | 0 | 0 | 0 | 0 | 341 | 0 | 0 | 0 | 341 |
| Aug-09 | 0 | 181 | 0 | 0 | 5,382 | 0 | 0 | 0 | 5,563 |
| Sep-09 | 0 | 218,869 | 0 | 0 | 0 | 0 | 0 | 0 | 218,869 |
| Oct-09 | 0 | 9,007 | 0 | 19,862 | 5,896 | 0 | 0 | 0 | 34,765 |
| Nov-09 | 0 | 4,585 | 0 | 0 | 0 | 0 | 0 | 0 | 4,585 |
| Dec-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jan-10 | 0 | 16,721 | 0 | 0 | 4,855 | 0 | 0 | 0 | 21,576 |
| Feb-10 | 0 | 121,753 | 0 | 2,264 | 0 | 0 | 0 | 0 | 124,017 |
| Total | 1,315,891 | 507,172 | 0 | 42,566 | 16,474 | 0 | 0 | 0 | 1,882,103 |

Harris Unit 1 March 1, 2009 – February 28, 2010 Test Period MWh Losses by Cause

| | Refuel | Repairs | Coastdowns | Power Ascension | Testing | SCPSC | Acts of Nature | Low Load | Total |
|--------------|---------|---------|------------|--------------------|---------|-------|-------------------|----------|---------|
| Mar-09 | 0 | 7,058 | 0 | 0 | 0 | 0 | 0 | 0 | 7,058 |
| Apr-09 | 280,800 | 0 | 24,856 | 0 | 0 | 0 | 0 | 0 | 305,656 |
| May-09 | 214,470 | 0 | 0 | 20,300 | 0 | 0 | 0 | 0 | 234,770 |
| Jun-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jul-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aug-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sep-09 | 0 | 1,122 | 0 | 0 | 0 | 0 | 0 | 0 | 1,122 |
| Oct-09 | 0 | 0 | 0 | 0 | 228 | 0 | 0 | 0 | 228 |
| Nov-09 | 0 | 105,870 | 0 | 5,620 | 0 | 0 | 0 | 0 | 111,490 |
| Dec-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jan-10 | 0 | 6,197 | 0 | 0 | 0 | 0 | 0 | 0 | 6,197 |
| Feb-10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 495,270 | 120,247 | 24,856 | 25,920 | 228 | 0 | 0 | 0 | 666,521 |

Robinson Unit 2 March 1, 2009 – February 28, 2010 Test Period MWh Losses by Cause

| | Refuel | Repairs | Coastdowns | Power Ascension | Testing | SCPSC | Acts of Nature | Low Load | Total |
|--------|--------|---------|------------|--------------------|---------|-------|-------------------|----------|--------|
| Mar-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Apr-09 | 0 | 36,212 | 0 | 0 | 0 | 0 | 0 | 0 | 36,212 |
| May-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jun-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jul-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aug-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sep-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oct-09 | 0 | 6,002 | 0 | 0 | 0 | 0 | 0 | 0 | 6,002 |
| Nov-09 | 0 | 39,109 | 0 | 0 | 0 | 0 | 0 | 0 | 39,109 |
| Dec-09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jan-10 | 0 | 238 | 0 | 0 | 0 | 0 | 0 | 0 | 238 |
| Feb-10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 81,561 | 0 | 0 | 0 | 0 | 0 | 0 | 81,561 |

PEC Nuclear System Total March 1, 2009 – February 28, 2010 Test Period MWh Losses by Cause

| | Refuel | Repairs | Coastdowns | Power Ascension | Testing | SCPSC | Acts of Nature | Low Load | Total |
|--------------|------------------|------------------|---------------|--------------------|---------------|----------|-------------------|----------|------------------|
| Mar-09 | 683,560 | 8,569 | 0 | 0 | 4,991 | 0 | 0 | 0 | 697,120 |
| Apr-09 | 913,131 | 36,212 | 24,856 | 15,492 | 0 | 0 | 0 | 0 | 989,691 |
| May-09 | 214,470 | 77,794 | 0 | 25,248 | 6,037 | 0 | 0 | 0 | 323,549 |
| Jun-09 | 0 | 58,324 | 0 | 0 | 0 | 0 | 0 | 0 | 58,324 |
| Jul-09 | 0 | 2,317 | 0 | 0 | 341 | 0 | 0 | 0 | 2,658 |
| Aug-09 | 0 | 18,084 | 0 | 0 | 5,382 | 0 | 0 | 0 | 23,466 |
| Sep-09 | 0 | 451,291 | 0 | 0 | 0 | 0 | 0 | 0 | 451,291 |
| Oct-09 | 0 | 38,630 | 0 | 33,262 | 6,124 | 0 | 0 | 0 | 78,016 |
| Nov-09 | 0 | 150,055 | 0 | 5,620 | 5,939 | 0 | 0 | 0 | 161,614 |
| Dec-09 | 0 | 6,415 | 0 | 0 | 0 | 0 | 0 | 0 | 6,415 |
| Jan-10 | 0 | 39,876 | 0 | 0 | 4,855 | 0 | 0 | 0 | 44,731 |
| Feb-10 | 46,768 | 121,753 | 5,558 | 2,264 | 0 | 0 | 0 | 0 | 176,343 |
| Total | 1,857,929 | 1,009,320 | 30,414 | 81,886 | 33,669 | 0 | 0 | 0 | 3,013,218 |